

What is claimed is:

1. A method of depositing chemical protection material on the surface of a semiconductor substrate, comprising:
washing a semiconductor substrate; and

5 depositing a high molecular straight-chain organic compound on the surface of said semiconductor substrate during or after washing of said semiconductor substrate.

2. The semiconductor substrate surface protection method according to claim 1 wherein said high molecular
10 straight-chain organic compound is selected from substances of lower boiling point than 500°C.

3. The semiconductor substrate surface protection method according to claim 1 wherein said high molecular straight-chain organic compound is a compound of a single
15 type.

4. The semiconductor substrate surface protection method according to claim 1 wherein said high molecular straight-chain organic compound is cholesterol ($C_{27}H_{46}O$).

5. The semiconductor substrate surface protection
20 method according to claim 1 wherein said high molecular straight-chain organic compound is behenic acid ($C_{21}H_{43}COOH$).

6. The semiconductor substrate surface protection method according to claim 1 wherein, after deposition of said high molecular straight-chain organic compound onto the
25 surface of the semiconductor substrate, said high molecular straight-chain organic compound is further eliminated by the heat treatment temperature.

7. A method of depositing chemical protection material on the surface of a semiconductor substrate, comprising:

washing a semiconductor substrate; and

depositing a high molecular straight-chain organic

5 compound onto the surface of said semiconductor substrate by spin coating in which liquid containing the high molecular straight-chain organic compound and pure water is discharged from a spray nozzle while rotating the semiconductor substrate during or after washing of the semiconductor
10 substrate.

8. The semiconductor substrate surface protection method according to claim 7 wherein said high molecular straight-chain organic compound is selected from substances of boiling point lower than 500°C.

15 9. The semiconductor substrate surface protection method according to claim 7 wherein said high molecular straight-chain organic compound is a compound of a single type.

10 10. The semiconductor substrate surface protection method according to claim 7 wherein said high molecular straight-chain organic compound is cholesterol ($C_{27}H_{46}O$).

11. The semiconductor substrate surface protection method according to claim 7 wherein said high molecular straight-chain organic compound is behenic acid ($C_{21}H_{43}COOH$).

25 12. The semiconductor substrate surface protection method according to claim 7 wherein, after deposition of said high molecular straight-chain organic compound onto the

surface of the semiconductor substrate, said high molecular straight-chain organic compound is further eliminated by the heat treatment temperature.

13. A method of depositing chemical protection material
5 on the surface of a semiconductor substrate, comprising:

providing a tank containing the high molecular straight-chain organic compound and pure water; and

depositing the high molecular straight-chain organic compound by immersion of said semiconductor substrate in
10 said tank.

14. The semiconductor substrate surface protection method according to claim 13 wherein said high molecular straight-chain organic compound is selected from substances of boiling point lower than 500°C.

15 15. The semiconductor substrate surface protection method according to claim 13 wherein said high molecular straight-chain organic compound is a compound of a single type.

16. The semiconductor substrate surface protection
20 method according to claim 13 wherein said high molecular straight-chain organic compound is cholesterol ($C_{27}H_{46}O$).

17. The semiconductor substrate surface protection method according to claim 13 wherein said high molecular straight-chain organic compound is behenic acid ($C_{21}H_{43}COOH$).

25 18. The semiconductor substrate surface protection method according to claim 13 wherein, after deposition of said high molecular straight-chain organic compound onto the

surface of the semiconductor substrate, said high molecular straight-chain organic compound is further eliminated by the heat treatment temperature.